



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/626,576      | 07/27/2000  | Norman Hay           | 29752/36543A        | 9590             |

34431 7590 05/24/2005

HANLEY, FLIGHT & ZIMMERMAN, LLC  
20 N. WACKER DRIVE  
SUITE 4220  
CHICAGO, IL 60606

EXAMINER

MEINECKE DIAZ, SUSANNA M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3623

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/626,576

Applicant(s)

HAY ET AL.

Examiner

Susanna M. Diaz

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 52-86 is/are pending in the application.
- 4a) Of the above claim(s)    is/are withdrawn from consideration.
- 5) ☐ Claim(s)    is/are allowed.
- 6) ☒ Claim(s) 1-35 and 52-86 is/are rejected.
- 7) ☐ Claim(s)    is/are objected to.
- 8) ☐ Claim(s)    are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on    is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No.   .
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/14/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. This Non-Final Office action is responsive to Applicant's response to the Requirement for Information under 37 CFR 1.105, filed February 11, 2005.

Claims 1-35 and 52-86 are presented for examination.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it uses the word "disclosed." Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-35 and 52-86 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-17 recite an apparatus that comprises a database and various software modules. The various software modules (e.g., a farm identifier, a competition analyzer, an offer developer, and a farm selector) are not recited as executed by hardware (e.g., a computer or processor); therefore, these software modules are software *per se* and do not qualify as the structural elements required to form an apparatus. Consequently, claims 1-17 recite an apparatus that fails to comprise any structural elements, which is improper. Furthermore, without any significant structural elements integrated therein, a database could merely be a collection of data, which is non-statutory. Also, software *per se* is non-statutory. Even the clarification that the database comprises an on-line database that comprises an on-line exchange (claims 5 and 7) is at best a nominal recitation of technology, which is insufficient to overcome the rejection under § 101. It is respectfully suggested that the database be expressly recited as an electronic database, the recitation of a processor or computer be added to the claim, and the software modules be recited as executed by said processor or computer. Claims 52-68 recite similar limitations to those recited in claims 1-17; therefore, the same analysis under § 101 applies.

Claims 18-35 recite an article of manufacturing storing executable machine readable instructions; however, these instructions are not expressly recited as stored on a machine readable medium. Therefore, claims 18-35 are interpreted as software *per se*, which is non-statutory. Claims 69-86 recite similar limitations to those recited in claims 18-35; therefore, the same analysis under § 101 applies.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-35 and 52-86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-17 recite an apparatus that comprises a database and various software modules. The various software modules (e.g., a farm identifier, a competition analyzer, an offer developer, and a farm selector) are not recited as executed by hardware (e.g., a computer or processor); therefore, these software modules are software *per se* and do not qualify as the structural elements required to form an apparatus. Consequently, claims 1-17 recite an apparatus that fails to comprise any structural elements, which is improper. It is respectfully suggested that the database be expressly recited as an electronic database, the recitation of a processor or computer be added to the claim, and the software modules be recited as executed by said processor or computer. Claims 52-68 recite similar limitations to those recited in claims 1-17; therefore, the same analysis under § 112 applies.

Claims 18-35 recite an article of manufacturing storing executable machine readable instructions; however, these instructions are not expressly recited as stored on a machine readable medium. Therefore, claims 18-35 are interpreted as software *per se*, which is improper under § 112, 2<sup>nd</sup> paragraph. Claims 69-86 recite similar limitations to those recited in claims 18-35; therefore, the same analysis under § 112 applies.

Art Unit: 3623

Claims 8, 12, 26, 32, 59, 63, 65, 77, and 83 recite an "elevator/loader discriminator." It is not clear whether this limitation should be read as "elevator or loader discriminator" or "elevator and loader discriminator" or "elevator and/or loader discriminator." For examination purposes, "elevator/loader discriminator" will be interpreted as "elevator or loader discriminator." A similar rejection applies to the recitations of "elevator(s)/loader(s)."

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-7, 9-11, 13, 15-25, 27-29, 31, 33-35, 52-58, 60-62, 64, 66-76, 78-80, 82, and 84-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latacz-Lohmann et al. ("Auctioning Conservation Contracts: A Theoretical Analysis and an Application") in view of Clark, Jr. et al. (U.S. Patent No. 6,064,943).

Latacz-Lohmann analyzes an approach to auctioning conservation contracts. As part of these conservation programs, farmers may receive money from a government body as an incentive to alter farming practices to be more environmentally friendly. For example, Latacz-Lohmann discloses one scenario of a simple auction in which farmers submit bids for participation in a government subsidized farming program based on

Art Unit: 3623

“targeting program objectives” (§§ 30, 32). As part of the “targeting program objectives” scenario:

...It is assumed that the program administrator has information sufficient to estimate the prospective environmental benefits of enrolling each farmers' land. This allows him or her to rank all bids for acceptance based on the ratio of benefits to public cost of enrolling the land. This “cost-effectiveness targeting” was employed during CRP signups 10-12. In our model we simulate the outcome of this mechanism by ranking all bids for acceptance according to the ratio of nitrogen reduction (Mathematical Expression Omitted) to the individual farmers' (optimal) bids. (§ 32)

The sponsoring government agency selects the farmers based on eligibility criteria (§ 10) and the respective amount of payment offered to the selected farmers is based on a cost-benefit analysis:

4. Perfect-information offer system: This variant is intended to serve as “best-case” reference regarding program cost-effectiveness. It is assumed that the government has perfect information about each farmer's opportunity costs and potential contribution to the program goals and therefore can offer each farmer a payment equal to or marginally above his or her opportunity cost. The farmers are accepted in the order of their benefit-cost ratios within the overall budget. (§ 36)

The cost-benefit analysis and program participation requirements are based on various factors, including risk factors, variability of profits between program participation versus non-program participation (i.e., profit differential), hectares of land subject to program participation requirements, soil quality, amount of reduction in fertilizer usage and cost thereof, etc. (§§ 21-29). Ideally, both the farmers and the conservation program sponsors have access to all of the relevant cost-benefit information so that the

Art Unit: 3623

farmers can assess if it is worthwhile for them to participate in the conservation program while the sponsors can dole out their incentives to farmers who will yield the greater environmental benefit in light of the incentives provided (¶¶ 9, 12, 14, 33, 36, 42).

[Claim 1] As per claim 1, Latacz-Lohmann discloses that both the farmers and conservation program sponsors have access to all relevant cost-benefit information (as discussed above), including a profit differential between program versus non-program participation. While Latacz-Lohmann makes specific reference to growing a crop with reduced nitrogen fertilizer usage as opposed to the recited crops that are different from a crop of interest; the Examiner asserts that the cost-benefit analysis of growing a given crop with more fertilizer versus less fertilizer is analogous to that associated with growing one crop versus another type of crop (e.g., corn versus beans) since both types of analysis work to solve the same problem, i.e., promoting farming techniques that are more environmentally friendly. Furthermore, the Examiner submits that it is old and well-known in the art of subsidized farming programs to provide incentives to farmers to grow different crops altogether. For example, certain crops prevent soil erosion more than others; therefore, farmers may be paid incentives to grow one of these more "soil friendly crops." Also, several countries offer their farmers incentives to grow legal crops instead of more profitable crops, such as those used to produce drugs. Since conservative programs commonly include both incentives to alter fertilizing techniques (as taught by Latacz-Lohmann) as well as to encourage the harvesting of more environmentally friendly crops, the Examiner submits that Latacz-Lohmann's cost-benefit analysis solves a similar problem in both arenas; therefore, the Examiner



Art Unit: 3623

asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to apply Latacz-Lohmann's cost-benefit analysis to a conservation program that encourages farmers to grow a crop of interest (different from the crops they current harvest) in order to promote more environmentally friendly farming practices while providing the program sponsor with the greatest bang for the buck without compromising the economic survival of participating farmers.

Latacz-Lohmann does not expressly teach that the cost-benefit analysis is based on a current market price for each crop, yet (as discussed above), Latacz-Lohmann does disclose the computation of a profit differential between program versus non-program participation. The Examiner submits that it is old and well-known in the art to utilize the current or expected sale price of a crop to assist in estimating an expected profit. Since Latacz-Lohmann's model requires valuations of items to be sold as part of the profit analysis (¶¶ 9, 11), the Examiner submits that an understanding of current market price for each crop would be crucial in assessing not only a profit differential, but also in guiding a program sponsor in determining a reasonable incentive price to offer each farmer. Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art to modify Latacz-Lohmann's collection of analysis data (i.e., database) to include current market price data for crops which are different from the crop of interest in order to enable the farmers and program sponsors to have more convenient access to data that yields a more accurate understanding of which program terms would behoove all participants, thereby addressing the limitation of "a database."

As per claim 1, a modified version of Latacz-Lohmann's profit-analysis to apply to incentives for growing different crops has been discussed, thereby addressing the limitation "estimating a profit that the farmer can expect to earn by growing at least one of the crops which are different from the crop of interest."

As per claim 1, Latacz-Lohmann's conservation program sponsors only select farmers from a set of farmers with respective farms determined to be within program guidelines (§ 10). In light of the analogy made between growing different crops versus growing a crop at a reduced nitrogen fertilizer level, the Examiner submits that the development of a "set of farms capable of growing the crop of interest, the set of farms including a first farm associated with a first farmer and a second farm associated with a second farmer" is analogous to selecting a set of eligible farmers within the conservation program guidelines.

Regarding claim 1, Latacz-Lohmann discloses that a program sponsor "can offer each farmer a payment equal to or marginally above his or her opportunity cost" (§ 36), which is based on a profit expectation and when modified in light of the alternate crop analogy presented above addresses the limitation of utilizing the production estimate "to determine possible offers to be made to the farms in the set of farms based at least in part upon the estimated profits to be earned for growing the at least one crop which is different from the crop of interest" and the limitation of assessing these offers "to select farms from the set of farms to receive an offer to grow the crop of interest."

Further regarding claim 1, Latacz-Lohmann fails to expressly teach that all data is stored in a database accessible by a farm identifier, which in turn is in communication

Art Unit: 3623

with a competition analyzer, an offer developer, and a farm selector. In other words, the analysis of Latacz-Lohmann is not expressly disclosed as carried out utilizing software implemented on a machine (e.g., a computer) that communicates with a database. However, the Examiner submits that it is old and well-known in the art of automation to utilize software implemented on a computer in order to perform calculations and analyses commonly performed by hand (i.e., by a human user) in order to mitigate calculation/analysis errors and increase calculation/analysis speed. As a matter of fact, Clark discusses the desirability of automating the collection and analysis of agronomic data. Clark introduces the improvement of the disclosed invention over the prior art as follows:

Because of the increasing competition and mechanization of farming, data collection has become even more important for the farmer so that he might keep better track of his costs to determine the profitability of various crops planted on various fields throughout his farm. Typically, a farmer works on a close margin such that accurate cost accounting can be critical in helping a farmer make a decision as to the various crops planted and grown. Unfortunately, for various reasons, computers have not been successfully applied to the farmer's data collection and analysis problem.

In order to solve these and other problems in the prior art, the inventors herein have succeeded in designing and developing a unique computer network which includes a portable computer with a user-friendly interface for on-the-spot data recording by the farmer having sufficient capabilities for satisfying virtually all of his information handling needs. This computer network is composed of a client-client-server configuration. (col. 1, lines 45-62)

As discussed above, Latacz-Lohmann addresses the importance of a farmer having the capability of quickly and accurately assessing crop-related factors to

Art Unit: 3623

determine whether or not it would behoove him/her to participate in a conservation program, based at least in part on profit differential considerations. Similarly, Clark assists farmers in quickly and accurately making crop-related decisions, based at least in part on profit considerations. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to utilize an automated computer system with software, including a database, a farm identifier, a competition analyzer, an offer developer, and a farm selector to carry out the methodology and analysis addressed by the modified version of Latacz-Lohmann in order to complete the required methodology and analysis more quickly and accurately, which is a well-known benefit of computer automation and is particularly applicable to the farming industry (as suggested by Clark). *This analysis of computer automation also applies to the addition of all other software modules to perform the recited functionality in dependent claims as well.*

[Claim 2] As per claim 2, Latacz-Lohmann discloses that risk factors such as land quality, which is location-dependent, may be taken into account when assessing profits and potential for environmental improvements (¶¶ 10, 26), which when modified in light of the alternate crop analogy presented above addresses the limitations of selecting farms based upon at least one of: "the estimated profits developed by the offer developer" and "risk estimations associated with the farms in the set of farms."

[Claim 3] Regarding claim 3, Latacz-Lohmann assesses a varying degree of nitrogen fertilizer reduction for each farm and the effects thereof, taking into account a corresponding yield and numbers of hectares (¶¶ 25-26), which when modified in light of

Art Unit: 3623

the alternate crop analogy presented above addresses the limitations of identifying farms based upon at least one of: "farm capability to grow the crop of interest" and "farm capability to grow a predefined quantity of the crop of interest."

[Claim 4] As per claim 4, Latacz-Lohmann discloses that risk factors such as land quality, which is location-dependent, may be taken into account when assessing profits and potential for environmental improvements (¶¶ 10, 26), which when modified in light of the alternate crop analogy presented above addresses the limitation of the database comprising "a farm database containing data indicative of at least one of agronomic characteristics of a farm and geographical information concerning a farm."

Alternatively, Latacz-Lohmann does not expressly teach that the cost-benefit analysis is based on a current market price for each crop, yet (as discussed above), Latacz-Lohmann does disclose the computation of a profit differential between program versus non-program participation. The Examiner submits that it is old and well-known in the art to utilize the current or expected sale price of a crop to assist in estimating an expected profit. Since Latacz-Lohmann's model requires valuations of items to be sold as part of the profit analysis (¶¶ 9, 11), the Examiner submits that an understanding of current market price for each crop would be crucial in assessing not only a profit differential, but also in guiding a program sponsor in determining a reasonable incentive price to offer each farmer. Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art to modify Latacz-Lohmann's collection of analysis data (i.e., database) to include "a product market database containing data indicative of sales prices of types of products" in order to enable the farmers and

Art Unit: 3623

program sponsors to have more convenient access to data that yields a more accurate understanding of which program terms would behoove all participants.

[Claims 5-7] As per claims 5-7, neither Latacz-Lohmann nor Clark expressly teaches that the database comprises an on-line database or a local database. However, Clark does disclose the benefits of allowing farmers to access real-time farm and crop-related data on-line via a server and/or synchronize data with a local PDA. For example, this arrangement facilitates the sharing of farm and crop-related information among various farmers who may have invaluable knowledge regarding a problem or decision that another farmer is currently facing, via use of a PDA in conjunction with a PC and server, i.e., conduction of an on-line exchange (col. 2, line 24 through col. 3, line 14). Clark suggests that the ability to access needed data on-line in real time assists farmer in more quickly and confidently making informed decisions regarding their crops; therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to facilitate the capability of a user of the modified Latacz-Lohmann-Clark combination to electronically access at least one on-line database and utilize at least one local database to store and ascertain at least one current market price through an on-line exchange in order to allow the user to quickly and confidently gather the most up-to-date and likely most accurate crop-related market price data for promoting more informed decision-making.

[Claim 9] As per claim 9, a modified version of Latacz-Lohmann's profit-analysis to apply to incentives for growing different crops has been discussed, thereby addressing

Art Unit: 3623

the limitation “estimating a profit that a farm in the set of farms can expect to earn by growing the at least one of the crops which is different from the crop of interest.”

As per claim 9, Latacz-Lohmann assesses a varying degree of nitrogen fertilizer reduction for each farm and the effects thereof (§§ 25-26). In light of the analogy made between growing different crops versus growing a crop at a reduced nitrogen fertilizer level, the Examiner submits that the selection of which of the “at least one crop which is different from the crop of interest” is a most profitable crop is analogous to selecting one of various potential profit-maximizing levels of reduced nitrogen fertilizer usage.

Therefore, for the reasons already presented above in relation to the analogy between the two concepts, the Examiner submits that the modified version of Latacz-Lohmann’s evaluation of varying degrees of profit-maximizing nitrogen fertilizer reduction for each farm and the effect thereof (§§ 25-26) to apply to a selection of one of multiple crops for the common purpose of promoting more environmentally friendly farming practices addresses the limitation that deals with utilizing profit data “to select a most profitable crop from the at least one crop which is different from the crop of interest.”

[Claim 10] Regarding claim 10, Latacz-Lohmann assesses a varying degree of nitrogen fertilizer reduction for each farm and the effects thereof, taking into account a corresponding yield and numbers of hectares (§§ 25-26), which when modified in light of the alternate crop analogy presented above addresses the limitation of utilizing the product selection data “for estimating a quantity of the crop of interest to be produced by a farm of interest in the set of farms.”

Regarding claim 10, Latacz-Lohmann discloses that a program sponsor “can offer each farmer a payment equal to or marginally above his or her opportunity cost” (¶ 36), which is based on a profit expectation and when modified in light of the alternate crop analogy presented above addresses the limitation of utilizing the production estimate “to develop a price to be offered the farm of interest to grow the quantity of the crop of interest estimated.”

[Claim 11] Regarding claim 11, Latacz-Lohmann discloses that risk factors are taken into account when adjusting the price to be offered a farmer of interest to grow the quantity of crop with desired fertilizer levels (¶¶ 21-26), which when modified in light of the alternate crop analogy presented above addresses the limitation of using a risk identifier for “identifying a risk factor associated with the farm of interest” and developing “the price to be offered the farm of interest to grow the quantity of the crop of interest based at least in part upon the risk factor.”

[Claim 13] As per claim 13, neither Latacz-Lohmann nor Clark expressly teaches that a current market price is ascertained by accessing at least one on-line market.

However, Clark does disclose the benefits of allowing farmers to access real-time farm and crop-related data on-line via a server. For example, this arrangement facilitates the sharing of farm and crop-related information among various farmers who may have invaluable knowledge regarding a problem or decision that another farmer is currently facing (col. 2, line 55 through col. 3, line 14). Clark suggests that the ability to access needed data on-line in real time assists farmer in more quickly and confidently making informed decisions regarding their crops; therefore, the Examiner asserts that it would



Art Unit: 3623

have been obvious to one of ordinary skill in the art at the time of Applicant's invention to facilitate the capability of a user of the modified Latacz-Lohmann-Clark combination to electronically access at least one on-line market to ascertain at least one current market price of a crop of interest and a different crop in order to allow the user to quickly and confidently gather the most up-to-date and likely most accurate crop-related market price data for promoting more informed decision-making.

[Claim 15] Regarding claim 15, Latacz-Lohmann discloses that risk factors and profit information are taken into account when adjusting the price to be offered a farmer of interest to grow the quantity of crop with desired fertilizer levels (¶¶ 21-29), which when modified in light of the alternate crop analogy presented above addresses the limitation of determining "the possible offers based in part upon at least one risk factor and profits to be earned by the farms in growing the crop of interest."

[Claim 16] Claim 16 further modifies "the aggregate economic profiles of the elevators" defined in claim 2; however, claim 2 recites this limitation in the alternative. The rejection of claim 2 expressly addresses another one of the possible alternatives; therefore, claim 16 effectively recites an alternative option that need not be expressly addressed by the art rejection at this time.

[Claim 17] Claim 17 further modifies "the aggregate economic profiles of the loaders" defined in claim 2; however, claim 2 recites this limitation in the alternative. The rejection of claim 2 expressly addresses another one of the possible alternatives; therefore, claim 17 effectively recites an alternative option that need not be expressly addressed by the art rejection at this time.

Art Unit: 3623

[Claims 18-25, 27-29, 31, 33-35] Claims 18-25, 27-29, 31, and 33-35 recite limitations already addressed by the rejection of claims 1-7, 9-11, 13, and 15-17 above; therefore, the same rejection applies.

Furthermore, it is noted that the computer-automated apparatus of claims 1-7, 9-11, 13, and 15-17 would necessarily require “an article of manufacture storing machine readable instructions which, when executed by a machine, cause the machine to” perform the recite functionality.

[Claims 52-58, 60-62, 64, 66-68] Claims 52-58, 60-62, 64, and 66-68 recite limitations already addressed by the rejection of claims 1-7, 9-11, 13, 15-25, 27-29, 31, and 33-35 above; therefore, the same rejection applies.

Furthermore, it is noted that Latacz-Lohmann discloses that finalized contracts are actually awarded through an auction (§§ 1, 36, 45), which when modified in light of the alternate crop analogy presented above addresses the limitation of selecting farms from the set of farms to receive a *contractual* offer.

[Claims 69-76, 78-80, 82, 84-86] Claims 69-76, 78-80, 82, and 84-86 recite limitations already addressed by the rejection of claims 1-7, 9-11, 13, 15-25, 27-29, 31, and 33-35 above; therefore, the same rejection applies.

Furthermore, it is noted that Latacz-Lohmann discloses that finalized contracts are actually awarded through an auction (§§ 1, 36, 45), which when modified in light of the alternate crop analogy presented above addresses the limitation of selecting farms from the set of farms to receive a *contractual* offer.

Art Unit: 3623

10. Claims 8, 12, 14, 26, 30, 32, 59, 63, 65, 77, 81, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latacz-Lohmann et al. ("Auctioning Conservation Contracts: A Theoretical Analysis and an Application") in view of Clark, Jr. et al. (U.S. Patent No. 6,064,943), as applied to claims 1, 18, 52, and 69 above, and further in view of "USDA: Cotton & Wool Outlook."

[Claims 8, 12, 14] As discussed above, the Latacz-Lohmann-Clark combination addresses an automated system for assessing which farms a conservation program sponsor should offer contracts to in exchange for agreeing to grow a crop of interest. Also discussed above is how this decision is based on various market, risk, crop feasibility (e.g., based on geographical and geological elements), and profit-related factors. The Latacz-Lohmann-Clark combination does not expressly take into account an elevator/loader profile associated with each of a set of farms when ultimately selecting farms. However, "USDA: Cotton & Wool Outlook" explains that contractual relationships between a farmer and a local elevator can affect the risk profile associated with the farmer's farm (§ 100). As per claim 8 and as discussed above, the Latacz-Lohmann-Clark combination selects only farmers that are eligible to participate in a given conservation program based on conservation program guidelines; therefore, if a farmer is not able to handle a crop of interest, then he/she would not be able to participate in the program. Since "USDA: Cotton & Wool Outlook" mentions the reliance of many farmers on their elevators as part of their risk strategy, if a farmer's elevator(s) cannot handle a crop of interest, then the farmer ultimately would not as likely be able to handle final delivery of the crop of interest as well. Therefore, the Examiner submits

Art Unit: 3623

that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to incorporate with the analysis of the Latacz-Lohmann-Clark combination an understanding of each farm's associated elevator/loader's capabilities in reference to a crop of interest and eliminating those which cannot handle the crop of interest (as per claim 8) in order to more feasibly determine whether each farm would viably fulfill its end of the conservation contract when it comes to delivering a specified crop of interest.

As per claim 12 and as discussed above, the Latacz-Lohmann-Clark combination selects only farmers that are eligible to participate in a given conservation program based on conservation program guidelines, including various risk, profit, and quantity factors, thereby addressing the limitation of "selecting a preferred set of farms from the set of farms based on at least one of: (i) a risk factor, (ii) an expected profit, and (iii) an expected quantity." Again, the Latacz-Lohmann-Clark combination does not expressly take into account an elevator/loader profile associated with each of a set of farms when ultimately selecting farms. However, "USDA: Cotton & Wool Outlook" explains that contractual relationships between a farmer and a local elevator can affect the risk profile associated with the farmer's farm (¶ 100). An analysis of how an elevator/loader profile affects each farmer's risk profile would yield a more comprehensive understanding of how willing he/she is to accept a proposed conservation contract and at what price (i.e., how much the farmer is willing to trade-off in guaranteed profit versus added risk with more volatile profits yields). Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to

Art Unit: 3623

incorporate with the analysis of the Latacz-Lohmann-Clark combination an aggregate economic profile for each elevator/loader associated with a farm in the preferred set of farmers to assist in performing the step of selecting farms to receive an offer to grow the crop of interest based on the aggregate economic profiles developed by the elevator/loader profiler and the quantity of the crop of interest to be grown (as per claim 12) in order to yield a more comprehensive understanding of how willing each farmer is to accept a proposed conservation contract and at what price (i.e., how much the farmer is willing to trade-off in guaranteed profit versus added risk with more volatile profits yields). Similarly, as per claim 14, if a farmer has a relationship with multiple elevators/loaders, then the most accurate cost-benefit analysis would require an understanding of the farmer's greatest potential for profit (i.e., with the elevator/loader yielding the highest profit for the farmer) in order to glean a more accurate model of all of the farmer's options and the best deal that the conservation program sponsor would need to "beat" in order to attract the farmer to participate in the given conservation program. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt the offer developer addressed by the Latacz-Lohmann-Clark combination to, for a farm in question associated with more than one elevator/loader, determine the possible offer based upon the elevator/loader with a highest relative profit to be earned by the farm in question (as per claim 14) in order to glean a more accurate model of all of the farmer's options and the best deal that the conservation program sponsor would need to "beat" in order to

Art Unit: 3623

attract the farmer to participate in the given conservation program, especially in cases where the farmer has a relationship with multiple elevators/loaders

*The analysis of computer automation presented in the discussion of claim 1 above also applies to the addition of all other software modules to perform the recited functionality in dependent claims as well, including the recited "elevator/loader discriminator," "farm discriminator" (claim 8), "farm screener," "elevator/loader profiler," and "elevator/loader selector" (claim 12).*

[Claims 26, 30, 32] Claims 26, 30, and 32 recite limitations already addressed by the rejection of claims 8, 12, and 14 above; therefore, the same rejection applies.

[Claims 59, 63, 65] Claims 59, 63, and 65 recite limitations already addressed by the rejection of claims 8, 12, and 14 above; therefore, the same rejection applies.

[Claims 77, 81, 83] Claims 77, 81, and 83 recite limitations already addressed by the rejection of claims 8, 12, and 14 above; therefore, the same rejection applies.

### **Conclusion**

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


"Crosspoint and Cargill Join in \$16.2 Million Funding of ePropose to Drive Adoption of Revolutionary B2B eCommerce Solution" -- Discusses Cargill's funding of ePropose™, a solution for B2B eMarkets that utilizes software objects.

Art Unit: 3623

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Susanna M. Diaz  
Primary Examiner  
Art Unit 3623

May 11, 2005